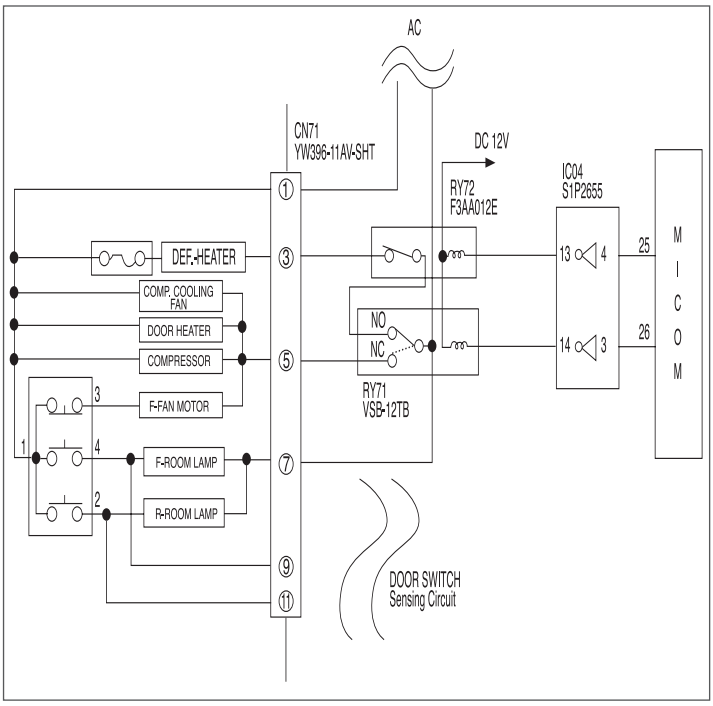
1. CIRCUIT DIAGRAM

1-1) Circuit descriptions

1) Relay check



** Cut off the power supply, separate the housing connected to MAIN PCB CN71 and measure followings.

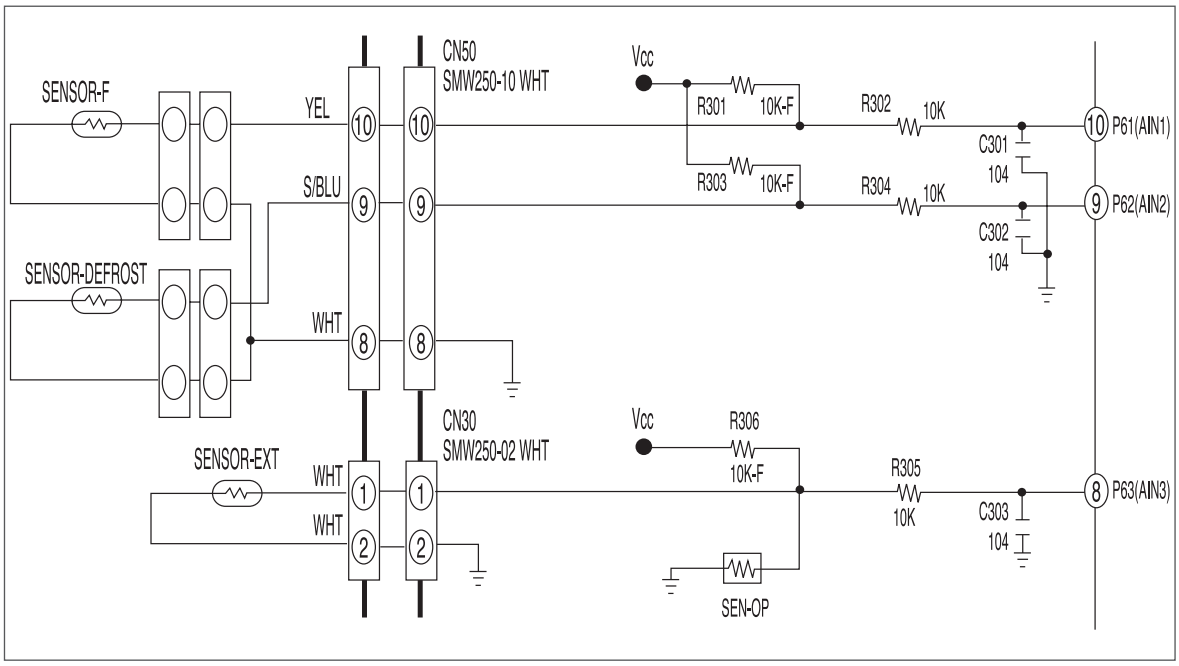
1. Measure the resistance between terminals as below, and carry out fault detection for LOAD & L/W

LOAD	MEASURING TERMINAL(M.T.)	EVALUATION
Defrost Heater	CN71 ③ - ①	
COMP	CN71 ⑤ - ①	Measuring Parallel Value
F FAN MOTOR	CN71 ⑤ - ①	
DOOR Heater	CN71 ⑤ - ①	
R Lamp	CN71 ⑦ - ①	Opening Door
R Lamp	CN71 ⑦ - ①	

* With power on, chech out the state of RELAY/Operation Circuit according to the LOAD state as below.

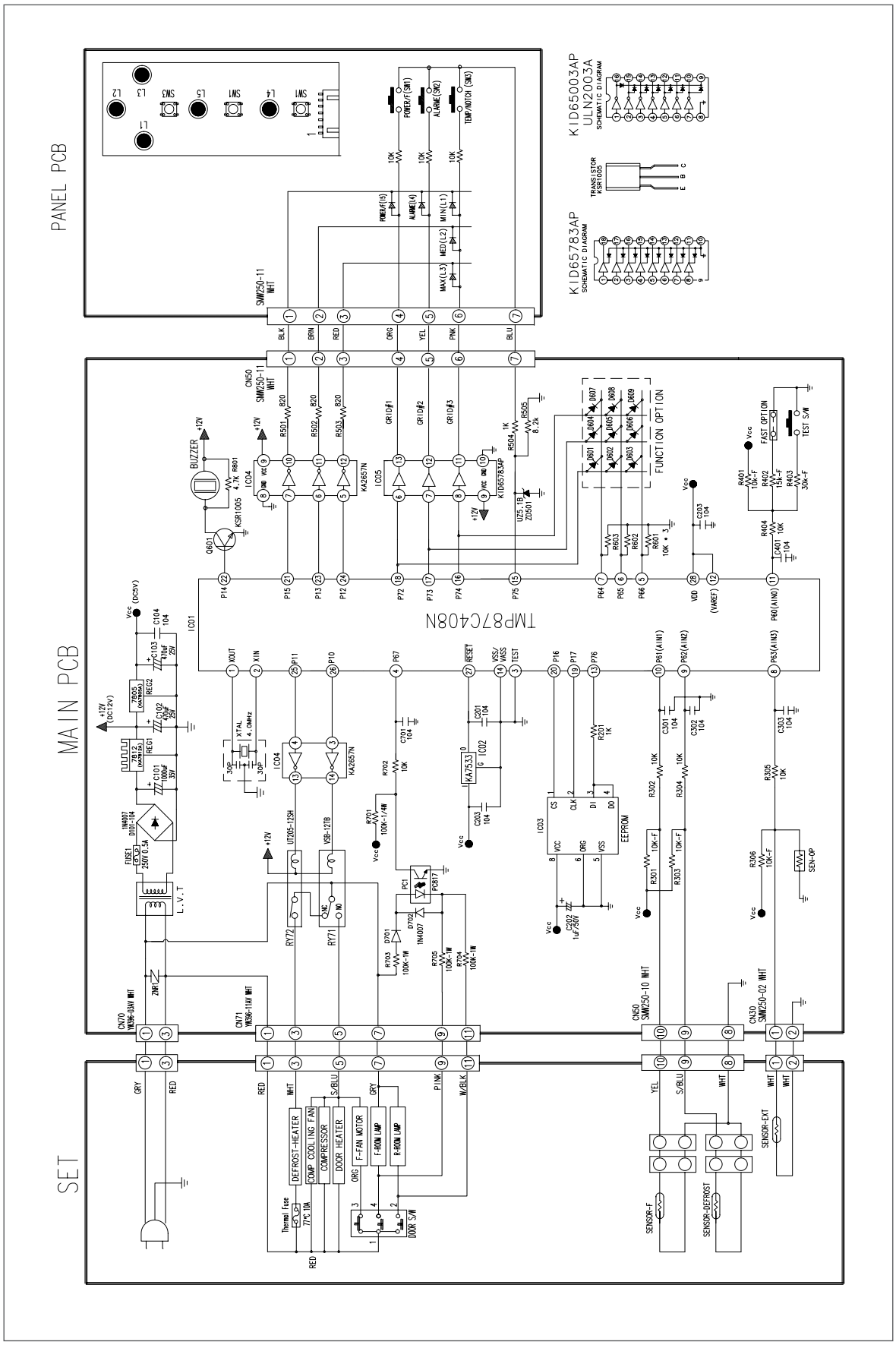
Operation	RELAY	M.T.	RESULT	DIFF. RESULT
Defrost & COMP OFF	RY72 & 71	CN71 ⑦ - ③	SV(Source voltage)	RY72 CONTACT SHORT/ Operational Circuit ERROR
	RY71	CN71 ⑦ - ⑤	SV	RY71 NO CONTACT SHORT/ Operational Circuit ERROR
COMP ON	RY72 & 71	CN71 ⑦ - ③	SV	RY72 OR RY71 NO CONTACT SHORT/ Operational Circuit ERROR
	RY71	CN71 ⑦ - ⑤	OV	RY71 NO OPEN /Operational Circuit ERROR
Defrost ON	RY72 & 71	CN71 ⑦ - ③	OV	RY72 or RY71 NC CONTACT OPEN /Operational Circuit ERROR
	RY71	CN71 ⑦ - ⑤	OV	RY71 NO SHORT /Operational Circuit ERROR

2) Sensor check



* Separate the housing connected to MAN PCB CN30/CN50 and do a checkout.
* Resistance decreases with increasing Temp with a NYC Sensor.

1. To check out FRE. Sensor, measure the resistance of CN50 ⑧ - ⑩
2. To check out Defrost Sensor, measure the resistance of CN50 ⑧ - ⑨
3. To check out Ambient Sensor, measure the resistance of CN30 ① - ②
4. Compare the above values with the Sensors' present Temps and those in the Temp table included in the MANUAL PARTS SPEC, and evaluate.

Appendix

1-2) Circuit